EXHIBIT A

Local Patent Rule 11: Joint Claim Terms Chart Signify N. Am. Corp. et al. v. Satco Products, Inc.

Joint Disputed Claim Terms or Phrases:

U.S. Patent No. 7,348,604

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"fastening means" ¹ (proposed by Signify) (claim 1) "fastening means for detachably coupling the housing element to the heat dissipation element" (proposed by Satco) (claim 1)	Function: fastening Structure: fastening means 450 as described in Figure 4 and at 5:18-24, 7:25-26, and 7:44-51; mechanical fasteners for example, screws, bolts rivets or the like; magnetic mounting systems; adhesives for example, pressure sensitive tape, glue or epoxy or the like; and equivalents	a fastener	Infringement contentions ² : Ex. A-1, pp. 6-7; Ex. A-2, pp. 5-6; Ex. A-3, pp. 6-7; Ex. A-4, pp. 5-7; Ex. A-5, pp. 5-7; Ex. A-6, pp. 5-6; Ex. A-7, pp. 5-6; Ex. A-8, pp. 7; Ex. A-9, pp. 5- 6; Ex. A-10, pp. 6-7; Ex. A- 11, pp. 4-5; Ex. A-12, pp. 4-5; Ex. A-13, pp. 4-5; Ex. A-14, pp. 5-7; Ex. A-15, pp. 6-8; Ex. A-16, pp. 6-8; Ex. A-17, pp. 5-6; Ex. A-18, pp. 5-6; Ex. A-
	thereof		19, pp. 6-7; Ex. A-20, pp. 5-6. Invalidity Contentions ³ : see, e.g., Chart A-1 at pp. 15-16; Chart A-2 at pp. 6-9; Chart A-

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¹ Signify proposes that the proper term for construction is "fastening means" not "fastening means for detachably coupling the housing element to the heat dissipation element."

² As used herein "Infringement Contentions" refers to Signify North America Corporation and Signify Holding B.V.'s Local Patent Rule 6 Disclosures, dated June 26, 2020.

³ As used herein "Invalidity Contentions" refers to Satco's Invalidity Contentions, dated September 9, 2020.

			3 at pp. 8-9; Chart A-4 at pp. 6-8; Chart A-5 at pp. 5-6; Chart A-6 at pp. 5-6.
"optically coupled" (claim 2)	Plain and ordinary meaning	joined together such that the optical element can manipulate the light	Infringement contentions: Ex. A-1, pp. 7-7; Ex. A-2, pp. 6-7; Ex. A-3, pp. 7-8; Ex. A-5, pp. 7-8; Ex. A-6, pp. 7; Ex. A- 7, pp. 6-7; Ex. A-8, pp. 8; Ex. A-9, pp. 6-7; Ex. A-10, pp. 7- 8; Ex. A-11, pp. 6; Ex. A-12, pp. 6; Ex. A-13, pp. 5-6; Ex. A-14, pp. 7-8; Ex. A-16, pp. 9; Ex. A-17, pp. 6-7; Ex. A- 20, pp. 7. Invalidity Contentions: see, e.g., Chart A-1 at p. 17; Chart A-2 at pp. 9-10; Chart A-3 at pp. 10-11; Chart A-4 at pp. 8- 9; Chart A-5 at pp. 6-7; Chart A-6 at pp. 6-7.
"integrally formed" (claim 3)	Plain and ordinary meaning	formed as a single unit from the same material	Infringement contentions: Ex. A-1, pp. 8-9; Ex. A-2, pp. 7-8; Ex. A-3, pp. 8-9; Ex. A-5, pp. 8-10; Ex. A-6, pp. 7-8; Ex. A-7, pp. 7-8; Ex. A-8, pp. 9; Ex. A-9, pp. 7-8; Ex. A-10, pp. 8-9; Ex. A-11, pp. 6-7; Ex. A-12, pp. 7; Ex. A-13, pp. 6- 7; Ex. A-14, pp. 8-9; Ex. A-

	16, pp. 9-10; Ex. A-17, pp. 7-8; Ex. A-20, pp. 7-8.
	Invalidity Contentions: see, e.g., Chart A-1 at pp. 17-18; Chart A-2 at p. 10; Chart A-3 at p. 11; Chart A-4 at pp. 9-10; Chart A-5 at p. 7; Chart A-6 at pp. 7-8.

U.S. Patent No. 7,358,929

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"diffuser disposed <u>over the housing</u> " (claim 17)	Plain and ordinary meaning	diffuser is placed on top of the housing/enclosure	Infringement contentions: Ex. B-1, pp. 8-9; Ex. B-2, pp. 7-9; Ex. B-3, pp. 4-6. Invalidity Contentions: see, e.g., Chart B-1 at pp. 4-5; Chart B-2 at p. 4; Chart B-3 at p. 3; Chart B-4 at pp. 4-5; Chart B-5 at pp. 3-4; Chart B-6 at pp. 3-5; Chart B-7 at p. 4.
"a reflector interior to the housing for providing a consistent level of light output to different portions of the diffuser" (claims 19, 63)	Plain and ordinary meaning, or in the alternative a reflector interior to the housing for providing a homogenized and diffused light output from different portions of the diffuser	Indefinite	Infringement contentions: Ex. B-1, pp. 11-12, 21-22; Ex. B-2, pp. 11, 25; Ex. B-3, pp. 8-9, 18-19. Invalidity Contentions: see, e.g., Chart B-1 at pp. 5, 9; Chart B-2 at pp. 5, 7; Chart B- 3 at pp. 4, 8; Chart B-4 at pp. 6, 10; Chart B-5 at pp. 6, 9; Chart B-6 at pp. 6-7, 11; Chart B-7 at pp. 5, 8.

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"disposed in an architectural	mounted or integrated into	Indefinite	Infringement contentions:
environment"	walls, ceilings, doors,		Ex. B-1, pp. 12; Ex. B-2, pp.
(proposed by Signify) (claim 23)	windows or floors		12-13; Ex. B-3, pp. 9-10.
"an architectural environment" (proposed by Satco) (claim 23)			Invalidity Contentions: see, e.g., Chart B-1 at p. 6; Chart B-2 at pp. 5-6; Chart B-3 at p. 4; Chart B-4 at p. 6; Chart B-5 at pp. 6-7; Chart B-6 at p. 7; Chart B-7 at pp. 5-6.
"a geometric shape" (claim 61)	Plain and ordinary meaning	a polygon (rectangle, triangle, etc.), not an irregular shape	Infringement contentions: Ex. B-1, pp. 19; Ex. B-2, pp. 21-22; Ex. B-3, pp. 15-16.
			Invalidity Contentions: see, e.g., Chart B-1 at pp. 7-8; Chart B-2 at p. 7; Chart B-3 at pp. 6-7; Chart B-4 at pp. 8-9; Chart B-6 at pp. 8-10.

U.S. Patent No. 6,972,525

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"self-inductance" (claim 1)	An inductive circuit component distinct from the claimed transformer	plain meaning, i.e., the property of an electric circuit whereby an electromotive force is induced in that circuit by a change of current in the circuit	Infringement contentions: Ex. C-1, pp. 8-10, 17-18; Ex. C-2, pp. 4-6; Ex. C-3, pp. 4-6; Ex. C-4, pp. 4-6; Ex. C-5, pp. 5-9; Ex. C-6, pp. 4-6; Ex. C-7, pp. 5-7, 12-14; Ex. C-8, pp. 5- 8; Ex. C-9, pp. 5-8; Ex. C-10, pp. 5-8; Ex. C-11, pp. 4-6. Invalidity Contentions: see, e.g., Chart C-1 at pp. 5-6; Chart C-2 at pp. 3-4; Chart C- 3 at pp. 4-6; Chart C-4 at pp. 3-4.

U.S. Patent No. 8,070,328

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"heatsink / heat sink" (claims 1, 2, 10, 16, 19)	Plain and ordinary meaning	a heat-conductive device that absorbs or dissipates unwanted heat and reduces heat in the LED downlight fixture	Infringement contentions: Ex. D-1, pp. 3-4, 14-15, 20- 21; Ex. D-2, pp. 2-3, 15-16, 21-22; Ex. D-3, pp. 2-3, 16- 17, 22-23; Ex. D-4, pp. 3-4, 16-17, 22-23; Ex. D-5, pp. 3- 4, 19-20, 25-27; Ex. D-6, pp. 2-3, 17, 22-23; Ex. D-7, pp. 3, 16, 21-22; Ex. D-8, pp. 2-3, 9, 14-15, 20, 26-27, 34; Ex. D-9, pp. 3, 15, 21-22; Ex. D-10, pp. 2-3, 15-16, 21-22; Ex. D-11, pp. 3, 17-18, 23-25; Ex. D-12, pp. 6-7, 19, 24-26, 32-33; Ex. D-13, pp. 2-3, 14-15; Ex. D- 14, pp. 2-3, 16-17. Invalidity Contentions: see, e.g., Chart D-1 at pp. 4-5, 14, 20-21, 46-47, 65-66; Chart D- 2 at pp. 3-4, 10, 21-22, 42-43, 55-56.
"engaging" (claim 5)	Plain and ordinary meaning	interlocked with	Infringement contentions: Ex. D-1, pp. 10-11; Ex. D-2, pp. 9-10; Ex. D-3, pp. 9-10; Ex. D-4, pp. 10-11; Ex. D-5,

			pp. 12-13; Ex. D-6, pp. 9-10; Ex. D-7, pp. 9-10; Ex. D-8, pp. 9-11; Ex. D-9, pp. 9-10; Ex. D-10, pp. 9-10; Ex. D-11, pp. 9-11; Ex. D-12, pp. 13-15; Ex. D-13, pp. 10-11; Ex. D- 14, pp. 9-10. Invalidity Contentions: see, e.g., Chart D-1 at pp. 15-16; Chart D-2 at pp. 13-14.
"said heat sink extending radially above an outer surface of said first reflector" (claim 10)	Plain and ordinary meaning	having radial extensions	Infringement contentions: Ex. D-1, pp. 20-21; Ex. D-2, pp. 21-22; Ex. D-3, pp. 22-23; Ex. D-4, pp. 22-23; Ex. D-5, pp. 25-27; Ex. D-6, pp. 22-23; Ex. D-7, pp. 21-22; Ex. D-8, pp. 20; Ex. D-9, pp. 21-22; Ex. D-10, pp. 21-22; Ex. D- 11, pp. 23-25; Ex. D-12, pp. 24-26; Ex. D-13, pp. 20-21; Ex. D-14, pp. 22-23.
			Invalidity Contentions: see, e.g., Chart D-1 at pp. 34-35; Chart D-2 at pp. 30-32.
"preselected spaced distance" (claim 19)	Plain and ordinary meaning	distance chosen in advance to achieve optimal cut-off, reduced glare and increased light efficiency	Infringement contentions: Ex. D-12, pp. 34-36.
			Invalidity Contentions: see, e.g., Chart D-1 at pp. 68-69; Chart D-2 at pp. 58-59.

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"one of above a lowermost edge reflector or beneath said lowermost edge of said reflector" (claim 19)	Plain and ordinary meaning	Indefinite	Infringement contentions: Ex. D-12, pp. 34-36. Invalidity Contentions: see, e.g., Chart D-1 at pp. 68-69; Chart D-2 at pp. 58-59.

U.S. Patent No. 7,256,554

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"without monitoring or regulating a first voltage or a first current" (claims 1, 6, 46, 51)	Plain and ordinary meaning	 directly or indirectly monitoring a first voltage directly or indirectly monitoring a first current directly or indirectly monitoring a first current 	Infringement contentions: Ex. G-1, pp. 9-15, 22, 38-40; Ex. G-2, pp. 6-15, 23, 38-45, 57; Ex. G-3, pp. 5-11, 17, 26- 29, 40; Ex. G-4, pp. 5-6, 16, 26-28, 39; Ex. G-5, pp. 5-6, 16, 26-28, 39; Ex. G-6, pp. 7- 14, 37, 56-66, 87. Invalidity Contentions: see,
		regulating a first voltage • directly or indirectly regulating a first current	e.g., Chart G-1 at pp. 5-7, 12, 25, 27; Chart G-2 at pp. 4-8, 13, 25, 27; Chart G-3 at pp. 3-7, 14-15, 28, 30; Chart G-4 at pp. 7-10, 15, 28, 30; Chart G-5 at pp. 7-8, 15-16, 28, 30-31; Chart G-6 at pp. 15-16, 19.
"buck converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁴	Plain meaning, i.e. a conventional DC-DC converter typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13-14, 17, 33-35, 39-40; Ex. G-5, pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28, 74-75,

⁴ For all "converter" terms for the 554 patent, Signify does not contend there is a dispute as both parties agree to plain and ordinary meaning. Rather, Signify takes issue with Satco's unnecessary description of "conventional" converters and "typical[]" topologies.

			87-88. Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"boost converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁵⁶	Plain meaning, i.e. a conventional DC-DC converter, typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13-14, 17, 33-35, 39-40; Ex. G-5, pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28, 74-75, 87-88.
			Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"buck-boost converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁵⁶	Plain meaning, i.e. a conventional DC-DC converter typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13- 14, 17, 33-35, 39-40; Ex. G-5,

			pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28, 74-75, 87-88. Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"CUK converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁵⁶	Plain meaning, i.e. a conventional DC-DC converter typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13- 14, 17, 33-35, 39-40; Ex. G-5, pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28,
			Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"flyback converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁵⁶	Plain meaning, a conventional DC-DC converter, typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13-

		V D C R	14, 17, 33-35, 39-40; Ex. G-5, pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28, 74-75, 87-88. Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"forward converter" (claims 2, 6, 47, 51)	Plain and ordinary meaning ⁵⁶	Plain meaning, a conventional DC-DC converter, typically having the following topology:	Infringement contentions: Ex. G-1, pp. 19-20, 23, 43-44, 50-52; Ex. G-2, pp. 21, 24, 50-51, 56-58; Ex. G-3, pp. 15, 18, 34-35, 39-41; Ex. G-4, 13-14, 17, 33-35, 39-40; Ex. G-5, pp. 13-14, 17, 34-35, 39-40; Ex. G-6, pp. 23-25, 28, 74-75, 87-88.
		■ D _{TR}	Invalidity Contentions: see, e.g., Chart G-1 at pp. 10-11, 13, 26-27, 29; Chart G-2 at pp. 11-12, 14, 26-27, 29; Chart G-3 at pp. 12-13, 15, 29-30, 32; Chart G-4 at pp. 13-14, 16, 29-30, 32; Chart G-5 at pp. 14-17, 29-30, 32.
"without using any feedback information relating to the at least one first LED" (claims 7, 52)	Plain and ordinary meaning	without directly or indirectly using any feedback information relating to the at	Infringement contentions: Ex. G-1, pp. 27-32, 52-53; Ex. G-2, pp. 29-34, 62-68; Ex. G-

	least one first LED	3, pp. 22-23, 41-43; Ex. G-4, pp. 21-22, 41-42; Ex. G-5, pp. 21-22, 41-42; Ex. G-6, pp. 39-49, 93-103.
		Invalidity Contentions: see, e.g., Chart G-1 at pp. 13-24, 29; Chart G-2 at pp. 14-24, 29; Chart G-3 at pp. 16-27, 32; Chart G-4 at pp. 16-27, 32; Chart G-5 at pp. 17-27, 32-33.

U.S. Patent No. 7,352,138

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"controller" (claims 1-5, 7, 9-15, 18, 20) t (claims 1-5, 7, 9-15, 18, 20)		-	Infringement contentions: Ex. E-1, pp. 2-10, 10-11, 14- 18, 20-23, 24-26, 26-31; Ex. E-2, pp. 2-14, 14, 17-23, 27- 20, 30-38; Ex. E-3, pp. 2-10, 10, 13-17, 20-21, 22-26, 27- 30; Ex. E-4, pp. 2-13, 13, 16- 20, 25-27, 28-33, 33-37; Ex. E-5, pp. 2-11, 11, 13-19, 21- 23, 23-30-33; Ex. E-6, pp. 2- 9, 9, 12-17, 19-22, 23-27, 27- 30; Ex. E-7, pp. 2-8, 8, 10-12, 12-13, 13-16, 16-19; Ex. E-8, pp. 2-17, 17-18, 20-28, 34-38,
	that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and	least one LED based on the power-related signal Structure: either: (a) the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 (b) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in	38-41, 41-47; Ex. E-9, pp. 3-8, 8-9, 13, 13-14, 14-16, 16-19; Ex. E-10, pp. 3-8, 8, 8-12, 13, 13-14, 15; Ex. E-11, pp. 2-14, 14-16, 17-21, 22-25, 26-28, 33-34. Invalidity Contentions: see, e.g., Chart E-1 at pp. 3-34, 40-69, 72-87; Chart E-2 at pp. 5-15, 17-36, 39-68; Chart E-3 at pp. 4-14, 16-63; Chart E-4 at pp. 5-27; Chart E-5 at pp. 5-13, 15-82; Chart E-6 at pp. 5-17, 19-82; Chart E-7 at pp. 5-

accompanying discussion in the specification;

(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claims 3, 5-8

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal

FIG. 6; or

(c) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50

and structural equivalents thereof.

Claims 3, 5-8

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- provide an essentially non-varying power to the at least one LED over a significant range of operation of the user interface

16, 20-79; Chart E-8 at pp. 1-4.

 provide an essentially non-varying power to the at least one LED over a significant range of operation of the user interface

Structure: may comprise any of the following:

- (a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification;
- (b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19,

Structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4

and structural equivalents thereof.

Claim 4

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- provide the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal

Structure: the components of

6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 4

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- provide the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal

Structure: may comprise any of the following:

(a) rectifier 404, low-pass

rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 and structural equivalents thereof.

Claims 9, 20-22

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface

Structure: either:

(a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in

filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification;

- (b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claims 9, 20-22

Functions:

 receive a powerrelated signal from an alternating current (A.C.) power source FIG. 6; or

(b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50

and structural equivalents thereof.

Claim 10

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface

- that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface

Structure: may comprise any of the following:

- (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

 variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal

Structure: either:

- (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or
- (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50

and structural equivalents thereof.

Claim 11

Functions:

 receive a powerrelated signal from an alternating current (A.C.) power source that provides signals As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 10

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface
- variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal

Structure: may comprise any

- other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light

Structure: INDEFINITE; alternatively, either:

(a) the components of rectifier 404, low-pass filter 408, DC

of the following:

- (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 11

Functions:

 receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage converter 402 and adjustment circuit that are shown in FIG. 6; or

(b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and either '399 patent at (i) 15:40-56 or (ii) 15:40-56 and 16:6-39 or (iii) 15:40-56, 16:6-39 and 20:30-54

and structural equivalents thereof.

Claim 12

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal

- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light

Structure: may comprise any of the following:

(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and

 variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface.

Structure: INDEFINITE; alternatively, either:

- (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit that are shown in FIG. 6; or
- (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54

and structural equivalents thereof.

Claim 13

Functions:

 receive a powerrelated signal from an accompanying discussion in the specification;

(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 12

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter

alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage

- provide power to the at least one LED based on the power-related signal
- variably control at least an intensity and a color of the light simultaneously in response to operation of the user interface

Structure: INDEFINITE; alternatively, either:

- (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit that are shown in FIG. 6: or
- (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39

of light generated by the at least one LED in response to operation of the user interface

 variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface.

Structure: may comprise any of the following:

- (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19,

and 20:30-54

and structural equivalents thereof.

Claim 14

Functions:

- receive a powerrelated signal from an alternating current

 (A.C.) power source that provides signals other than a standard
 A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface

Structure: INDEFINITE; alternatively, either:

(a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit that are shown in FIG. 6; or

6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 13

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface
- variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface

(b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54

and structural equivalents thereof.

Claims 15, 17-18

Functions:

- receive a powerrelated signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage
- provide power to the at least one LED based on the power-related signal
- variably control at least the intensity and the color temperature of the essentially white light in response to operation

•	variably control at
	least an intensity and
	a color of the light
	simultaneously in
	response to operation
	of the user interface

Structure: may comprise any of the following:

- (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents thereof.

As a non-limiting example, *see* '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.

Claim 14

Functions:

of the user interface so as to approximate light generation characteristics of an incandescent light source

Structure: INDEFINITE; alternatively, either:

- (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit that are shown in FIG. 6; or
- (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54

and structural equivalents thereof.

 receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage provide power to the at least one LED based on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to
operation of the user interface • variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface • variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface

Structure: may comprise any of the following:	
(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;	
(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;	
and/or structural equivalents thereof.	
As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.	
Claims 15, 17-18	
Functions:	
receive a power- related signal from an alternating current	
(A.C.) power source that provides signals other than a standard	
A.C. line voltage	

 provide power to the at least one LED based on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface
 variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface
 variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface
 variably control at least the intensity and the color temperature of the essentially white light in response to operation of the user interface

	so as to approximate light generation characteristics of an incandescent light source Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
"alternating current (A.C.) power source that provides signals other	power source that provides two or more alternating current (A.C.) signals, each	A.C. power source that provides two or more A.C. signals but does not provide	Infringement contentions : Ex. E-1, pp. 3-7, 38-45; Ex. E-2, pp. 3-6, 46-57; Ex. E-3,

than a standard A.C. line voltage"	being other than a sinusoidal	standard A.C. line voltage.	pp. 2-6, 36-44; Ex. E-4, pp.
(claims 1, 33)	wave at a standard frequency and amplitude		2-6, 43-52; Ex. E-5, pp. 4-7, 33-49; Ex. E-6, pp. 3-6, 38-45; Ex. E-7, pp. 3-6, 23-28; Ex. E-8, pp. 4-8; 59-72; Ex. E-9, pp. 4-8, 23-27; Ex. E-10, pp. 4-8, 21-24; Ex. E-11, pp. 2-12.
			Invalidity Contentions: see, e.g., Chart E-1 at pp. 3-7, 88-89; Chart E-2 at pp. 5-15, 75; Chart E-3 at pp. 4-14, 67; Chart E-4 at pp. 5-7, 28; Chart E-5 at pp. 5-13, 94-95; Chart E-6 at pp. 5-17, 93; Chart E-7 at pp. 5-16, 84; Chart E-8 at pp. 1-2, 5.
"A.C. Dimmer Circuit" / "(A.C.) dimmer circuit" / "alternating current (A.C.) dimmer circuit" (claims 2, 3, 6, 9, 17, 34)	a circuit that provides an alternating current (A.C.) dimming signal	Plain meaning	Infringement contentions: Ex. E-1, pp. 10-11, 11-14, 45-48; Ex. E-2, pp. 14, 14-17, 57-59; Ex. E-3, pp. 10, 10-13, 44-45; Ex. E-4, pp. 13, 13-16, 52-55; Ex. E-5, pp. 11, 11-13, 49-51; Ex. E-6, pp. 10, 10-12, 45-48; Ex. E-7, pp. 8, 8-10, 28-29; Ex. E-8, pp. 17-18, 18-20, 73-76; Ex. E-9, pp. 8-9, 9-13, 27-28; Ex. E-10, pp. 8-12, 24-25; Ex. E-11, pp. 14-16, 17, 32-33.
			Invalidity Contentions: see, e.g., Chart E-1 at pp. 8-9, 34-

			40, 45-48, 69-72, 89; Chart E-2 at pp. 15-27, 36-39, 41-46, 61, 75; Chart E-3 at pp. 14-27, 36-37, 39-44, 56, 67-68; Chart E-4 at pp. 5-10, 11-18, 26, 28; Chart E-5 at pp. 13-25, 47-48, 51-56, 69, 95; Chart E-6 at pp. 17-30, 44-54, 81, 93-94; Chart E-7 at pp. 16-32, 41-49, 78, 84; Chart E-8 at pp. 2, 5-6.
"power circuitry"	Plain and ordinary meaning	This is a "means-plus-	Infringement contentions:
(claims 20, 21)	It is Signify's position that this is not a means-plus-function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: Function: provide at least the power to the at least one LED based on the varying power-related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown	function" term pursuant to § 112, ¶ 6. Function: provide at least the power to the at least one LED based on the varying power-related signal Structure: either: (a) the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 (b) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (c) the components of power circuitry 108 that are shown in FIG. 8	Ex. E-1, pp. 31-34, 37-38; Ex. E-2, pp. 39-40, 40-42; Ex. E-3, pp. 30-31, 31-32; Ex. E-4, pp. 37-38, 38-40; Ex. E-5, pp. 33-34, 34-38; Ex. E-6, pp. 31-33, 33-34; Ex. E-7, pp. 18-19, 19-21; Ex. E-8, pp. 47-50, 50-53; Ex. E-9, pp. 18-19, 19-20; Ex. E-10, pp. 16, 16-18. Invalidity Contentions: see, e.g., Chart E-1 at pp. 77-87; Chart E-2 at pp. 67-68; Chart E-3 at pp. 62-63; Chart E-4 at pp. 5-7, 11-18, 27; Chart E-5 at pp. 74-82; Chart E-6 at pp. 46-55, 82; Chart E-7 at pp. 42-49, 79; Chart E-8 at p. 4.

	in FIG. 7, FIG. 8 and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.	and structural equivalents thereof.	
"adjustment circuit" (claims 20, 22)	Plain and ordinary meaning It is Signify's position that this is not a means-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: Function: variably control the at least one parameter of light based on the varying power- related signal Structure: adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification and/or structural equivalents thereof.	This is a "means-plus-function" term pursuant to § 112, ¶ 6 Function: variably control the at least one parameter of light based on the varying power-related signal Structure: the components of adjustment circuit 208 that are shown in FIG. 6 and structural equivalents thereof.	Infringement contentions: Ex. E-1, pp. 31-34, 37-38; Ex. E-2, pp. 36-38, 46; Ex. E-3, pp. 27-30, 35; Ex. E-4, pp. 33- 37, 43; Ex. E-5, pp. 30-33, 41; Ex. E-6, pp. 27-31, 37-38; Ex. E-7, pp. 16-18, 23; Ex. E-8, pp. 41-47, 58; Ex. E-9, pp. 16- 18, 23; Ex. E-10, pp. 15-16, 20-21. Invalidity Contentions: see, e.g., Chart E-1 at pp. 74-88; Chart E-2 at pp. 62-68, 72-75; Chart E-3 at pp. 57-67; Chart E-4 at pp. 11-18, 27-28; Chart E-5 at pp. 70-82, 92-94; Chart E-6 at pp. 46-55, 82, 88-93; Chart E-7 at pp. 42-49, 78-79, 84; Chart E-8 at pp. 4-5.

an act of: A) providing power to at least one LED based on a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage (claim 33) Plain and ordinary meaning

It is Signify's position that this is not a steps-plus-function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6:

function: providing power to at least one LED based on a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage

Structure: may comprise any of the following:

- (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;
- (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;

and/or structural equivalents

This is a "steps-plus-function" term pursuant to § 112, ¶ 6.

function: providing power to at least one LED based on a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage

structure: either:

- (a) the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4
- (b) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or
- (c) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50

and structural equivalents thereof.

Infringement contentions:

Ex. E-1, pp. 38-45; Ex. E-2, pp. 46-57; Ex. E-3, pp. 36-44; Ex. E-4, pp. 43-52; Ex. E-5, pp. 33-49; Ex. E-6, pp. 38-45; Ex. E-7, pp. 23-28; Ex. E-8, pp. 59-72; Ex. E-9, pp. 23-27; Ex. E-10, pp. 21-24.

Invalidity Contentions: see, e.g., Chart E-1 at pp. 3-7, 88-89; Chart E-2 at pp. 3-15, 67-68, 75; Chart E-3 at pp. 3-14, 62-63, 67; Chart E-4 at pp. 3-7, 28; Chart E-5 at pp. 4-13, 74-82, 94-95; Chart E-6 at pp. 3-17, 82, 93; Chart E-7 at pp. 4-16, 79, 84; Chart E-8 at p. 5.

an act of: providing power to the	thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Plain and ordinary meaning	This is a "steps-plus-function"	Infringement contentions:
at least one LED based on a power-related signal from an alternating current (A.C.) dimmer circuit (claim 34)	It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: function: • providing power to at least one LED based on a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • providing power to the at least one LED based on a power-related signal from an	term pursuant to § 112, ¶ 6. function: providing power to the at least one LED based on a power-related signal from an alternating current (A.C.) dimmer circuit structure: either: (a) the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 (b) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (c) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the	Ex. E-1, pp. 45-48; Ex. E-2, pp. 57-59; Ex. E-3, pp. 44-45; Ex. E-4, pp. 52-55; Ex. E-5, pp. 49-51; Ex. E-6, pp. 45-48; Ex. E-7, pp. 28-29; Ex. E-8, pp. 73-76; Ex. E-9, pp. 27; Ex. E-10, pp. 24-25. Invalidity Contentions: see, e.g., Chart E-1 at pp. 3-7, 89; Chart E-2 at pp. 15-17, 67-68, 75; Chart E-3 at pp. 14-16, 62-63, 67-68; Chart E-4 at pp. 5-7, 28; Chart E-5 at pp. 13-15, 74-82, 95; Chart E-6 at pp. 17-18, 82, 93-94; Chart E-7 at pp. 16-20, 79, 84; Chart E-8 at pp. 5-6.

alternating current (A.C.) dimmer circuit Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.	according to '399 patent at 17:9-50 and structural equivalents thereof.
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U.S. Patent No. 7,038,399

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"controller" (claims 1-5, 7-12, 15, 17, 47-49, 57-60, 62, 63)	Plain and ordinary meaning It is Signify's position that this is not a means-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: Claims 1, 3-5 Functions: • receive a power- related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power- related signal • provide an essentially non-varying power to the at least one LED over a significant	This is a "means-plus- function" term pursuant to § 112, ¶ 6. Claims 1, 3-5 Functions: • receive a power- related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power- related signal • provide an essentially non-varying power to the at least one LED over a significant range of operation of the user interface Structure: the components of rectifier 404, low-pass filter 408 and DC converter 402	Infringement contentions: Ex. F-1, pp. 2-23, 23-26, 26-32, 56-59, 59-60, 61, 61-62; Ex. F-2, pp. 2-30. 30-36, 36-40, 71-74, 74-75, 75-76, 76-77; Ex. F-3, pp. 20-20, 20-25, 26-31, 51-55, 55-57, 57-58; Ex. F-4, pp. 2-27, 28-34, 34-39, 67-68, 69-70, 70-71, 71-72; Ex. F-5, pp. 2-23, 23-30, 30-35, 64-66, 66-67, 67-68, 68-69; Ex. F-6, pp. 2-23, 23-27, 28-33, 59-62, 62-65, 65-66, 66-67, 67-68, 68-69; Ex. F-7, pp. 2-13, 13-16, 16-20, 35-37, 37-38, 38-39, 39-40; Ex. F-8, pp. 17-20, 42, 72-76, 84-86, 87-91, 91-92, 92-93; Ex. F-9, pp. 3-14, 14-16, 16-19, 30-33, 33-34, 35-36; Ex. F-10, pp. 3-13, 13-15, 15-17, 24-26, 28-31; Ex. F-11, pp. 2-21, 22-25, 26-28, 32-33, 33-34, 48-51. Invalidity Contentions: see, e.g., Chart F-1 at pp. 3-37, 43-81, 83-100, 107-117; Chart F-2 at pp. 5-37, 40-71, 84-98;

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	range of operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification; (b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12,	that are shown in FIG. 4 and structural equivalents thereof. Claim 2 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • provide the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal	Chart F-3 at pp. 4-65, 79-91; Chart F-4 at pp. 5-34, 41-48; Chart F-5 at pp. 5-87, 108- 125; Chart F-6 at pp. 5-85, 102-111; Chart F-7 at pp. 5- 83, 96-105; Chart F-8 at pp. 1- 5, 8-11.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 2 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • provide the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal Structure: may comprise any of the following:	Structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 and structural equivalents thereof. Claim 7 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface • variably control the at least one parameter of the light based at least	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	(a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification; (b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 7 Functions:	on the variable duty cycle of the power-related signal Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents thereof. Claim 8 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	 receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage provide power to the at least one LED based on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and 	other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light. • variably control the at least one parameter of the light based at least	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents	on the variable duty cycle of the power-related signal. Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit that are shown in FIG. 6; or	
	thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62- 28:26, Figs. 3-8. Claim 8 Functions: • receive a power-	(b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and either '399 patent at (i) 15:40-56 or (ii) 15:40-56 and 16:6-39 or (iii) 15:40-56,	
	related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based	16:6-39 and 20:30-54 and structural equivalents thereof. Claim 9 Functions: • receive a power- related signal from an	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	on the power-related signal variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal, variably control the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light. Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and	alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface • variably control the at least one parameter of the light based at least on the variable duty cycle of the power- related signal • variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface Structure: either:	

accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the fIGS. 9 or	Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 9 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof. Claim 10 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based		the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 9 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at	404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof. Claim 10 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;	on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface variably control at least an intensity and a color of the light simultaneously in response to operation of the user interface Structure: either:	

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	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 10 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals	404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof. Claim 11 Functions: • receive a power-related signal from an alternating current	
	other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of	 (A.C.) power source that provides signals other than a standard A.C. line voltage provide power to the at least one LED based 	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	light generated by the at least one LED in response to operation of the user interface • variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal • variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface • variably control at least an intensity and a color of the light simultaneously in response to operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and	on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 11 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals	shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof. Claims 12, 14-15 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at	
	other than a standard A.C. line voltage • provide power to the at least one LED based	least one parameter of light generated by the at least one LED in response to operation of the user interface	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	on the power-related signal variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface	 variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal variably control at least the intensity and the color temperature of the essentially white light in response to operation of the user interface so as to approximate light generation characteristics of an incandescent light source Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either 	
	Structure: may comprise any	FIGS. 9 or 10 or 11 (for the	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;	drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof.	
	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claims 12, 14-15 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals	Claim 17 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface Structure: either: (a) the components of rectifier	

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	other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface • variably control the at least one parameter of the light based at least on the variable duty cycle of the power-related signal • variably control at least two different parameters of the light generated by the at least one LED in response to operation of the user interface • variably control at least an intensity and a color temperature of	404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents thereof. Claims 47-48 Functions: • receive a power-related signal from an alternating current (A.C.) dimmer circuit • provide power to the at least one LED based on the power-related signal • variably control at	
	the white light simultaneously in	least one parameter of the essentially white	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	response to operation of the user interface variably control at least the intensity and the color temperature of the essentially white light in response to operation of the user interface so as to approximate light generation characteristics of an incandescent light source Structure: may comprise any of the following:	light in response to operation of the user interface so as to approximate light generation characteristics of an incandescent light source • variably control the at least one parameter of the essentially white light based at least on the variable duty cycle of the power-related signal Structure: either:	
	(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;	(a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at	

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	and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12,	17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof. Claim 49	
	11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 17 Functions: • receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface Structure: may comprise any of the following:	 Functions: receive a power-related signal from an alternating current (A.C.) dimmer circuit provide power to the at least one LED based on the power-related signal variably control at least one parameter of the essentially white light in response to operation of the user interface so as to approximate light generation characteristics of an incandescent light source variably control the at least one parameter of the essentially white 	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claims 47-48 Functions: • receive a power-related signal from an alternating current (A.C.) dimmer circuit • provide power to the at	light based at least on the variable duty cycle of the power-related signal • variably control at least an intensity and a color temperature of the essentially white light simultaneously in response to operation of the user interface Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents	
	least one LED based		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	on the power-related signal • variably control at least one parameter of the essentially white light in response to operation of the user interface so as to approximate light generation characteristics of an incandescent light source • variably control the at least one parameter of the essentially white light based at least on the variable duty cycle of the power-related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown	thereof. Claim 57 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • provide the second power as an essentially stable non-varying power to the at least one LED notwithstanding significant variations of the first power Structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 and structural equivalents thereof. Claim 58	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 49 Functions: • receive a power-related signal from an alternating current (A.C.) dimmer circuit • provide power to the at least one LED based on the power-related signal • variably control at least one parameter of the essentially white light in response to operation of the user	Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • provide the second power as a varying power to the at least one LED based on variations of the first power Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed	
	interface so as to	according to '399 patent at	

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	approximate light generation characteristics of an incandescent light source • variably control the at least one parameter of the essentially white light based at least on the variable duty cycle of the power-related signal • variably control at least an intensity and a color temperature of the essentially white light simultaneously in response to operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown	and structural equivalents thereof. Claim 59 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of	
	in FIG. 7, FIG. 8 (for the	controller 204B that are	

power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example. shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents	
As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 57 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • provide the second power as an essentially stable non-varying power to the at least one LED notwithstanding As a non-limiting example, thereof: thereof. Claim 60 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at	

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	significant variations of the first power Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification;	least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light	
	(b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12,	Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and either '399 patent at (i) 15:40-56 or (ii) 15:40-56 and 16:6-39 or (iii) 15:40-56, 16:6-39 and 20:30-54	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 58 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • provide the second power as a varying power to the at least one LED based on variations of the first power Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the	and structural equivalents thereof. Claim 62 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 59 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • variably control at least one LED in response to operation of the user interface	temperature of the light, and a temporal characteristic of the light • variably control at least an intensity and a color of the light simultaneously in response to operation of the user interface Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof.	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 60 Functions: • receive first power from an alternating current (A.C.) dimmer circuit	Claim 63 Functions: • receive first power from an alternating current (A.C.) dimmer circuit • provide second power to the at least one LED based on the first power • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	 provide second power to the at least one LED based on the first power variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 	characteristic of the light variably control at least an intensity and a color temperature of the white light simultaneously in response to operation of the user interface Structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50, 15:40-56, 16:6-39 and 20:30-54 and structural equivalents thereof.	

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;		
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. <u>Claim 62</u>		
	Functions:		
	 receive first power from an alternating current (A.C.) dimmer circuit provide second power to the at least one LED based on the first power 		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	 variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light, and a temporal characteristic of the light variably control at least an intensity and a color of the light simultaneously in response to operation of the user interface Structure: may comprise any 		
	of the following:		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;		
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Claim 63		
	Functions:		
	 receive first power from an alternating current (A.C.) dimmer circuit provide second power to the at least one LED 		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	based on the first power • variably control at least one parameter of light generated by the at least one LED in response to operation of the user interface, wherein the at least one parameter of the light that is variably controlled by the at least one controller in response to operation of the user interface includes at least one of an intensity of the light, a color of the light, a color temperature of the light • variably control at least an intensity and a color temperature of the white light simultaneously in	Construction	
	response to operation of the user interface		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	Structure: may comprise any of the following:		
	(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;		
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
"alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage" (claims 1, 7, 17, 30, 34)	power source that provides two or more alternating current (A.C.) signals, each being other than a sinusoidal wave at a standard frequency	A.C. power source that provides two or more A.C. signals but does not provide standard A.C. line voltage.	Infringement contentions: Ex. Ex. F-1, pp. 3-7, 26-32, 38-54; Ex. F-2, pp. 3-6, 36-37, 46-57; Ex. F-3, pp. 2-6, 25-26, 35-43; Ex. F-4, pp. 3-6, 34-35,

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	and amplitude		44-53; Ex. F-5, pp. 4-7, 30, 43-52; Ex. F-6, pp. 3-6, 28, 41-48, 59-60; Ex. F-7, pp. 3-6, 17, 24-29; Ex. F-8, pp. 4-8, 42, 59-72; Ex. F-9, pp. 4-8, 16-17, 23-27; Ex. F-10, pp. 3-8, 15, 21-24; Ex. F-11, pp. 2-12, 35-40, 48-49. Invalidity Contentions: see, e.g., Chart F-1 at pp. 3-7, 48-53, 85-86, 101-102, 104; Chart F-2 at pp. 5-15, 42, 64, 78-79, 81; Chart F-3 at pp. 4-14, 39, 58, 73, 75; Chart F-4 at pp. 5-7, 12, 33, 35-36, 38; Chart F-5 at pp. 5-13, 53, 73-74, 99-100, 103; Chart F-6 at pp. 5-17, 47-48, 84, 96, 98-99;
			Chart F-7 at pp. 5-16, 44, 81-82, 90, 92; Chart F-8 at pp. 1-4, 6.
"A.C. Dimmer Circuit" / "(A.C.) dimmer circuit" / "alternating current (A.C.) dimmer circuit" (claims 1, 4, 7, 14, 17, 30, 34, 47, 48, 57, 58, 59)	a circuit that provides an alternating current (A.C.) dimming signal	Plain meaning	Infringement contentions: Ex. F-1, pp. 10-14, 26-32, 38-54, 57, 59-60, 61; Ex. F-2, pp. 14-17, 37, 57-59, 72, 74-75, 75-76; Ex. F-3, pp. 10-16, 25-26, 43-25, 53-55, 55-57; Ex. F-4, pp. 13-16, 35-39, 53-56, 67, 69-70, 70-71; Ex. F-5, pp.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
			11-13, 30-31, 50-52, 64, 66, 68; Ex. F-6, pp. 10-11, 28-33, 48-52, 60-62, 66-67, 67-68; Ex. F-7, pp. 8-10, 17, 29-30, 35-36, 37-38, 38-39; Ex. F-8, pp. 17-20, 42, 72-76, 84-85, 87-88, 90-91, 91-92; Ex. F-9, pp. 8-12, 17, 27, 30-31, 33-34, 35; Ex. F-10, pp. 8-12, 15, 24-25, 28-29; Ex. F-11, pp. 14-17, 40-44, 48-51. Invalidity Contentions: see, e.g., Chart F-1 at pp. 8-11, 37-43, 53-59, 81-83, 86-87, 102, 104-105, 107-109, 110-114; Chart F-2 at pp. 15-23, 37-40, 43, 63, 64-65, 79, 81, 85-96; Chart F-3 at pp. 14-23, 36-37, 39-40, 57-59, 73-74, 76, 79-86; Chart F-4 at pp. 7-8, 11-19, 32-34, 36, 38, 41-46; Chart F-5 at pp. 13-22, 48-49, 54-59, 72, 74, 100, 103-104, 109-119; Chart F-6 at pp. 17-25, 45-46, 48-66, 83-85, 96-97, 99, 102-109; Chart F-7 at pp. 16-28, 43-60, 80-82, 90, 93, 96-102; Chart F-8 at pp. 2, 4, 6-10.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
"power circuitry" (claims 17, 18)	Plain and ordinary meaning It is Signify's position that this is not a means-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: Function: provide at least the power to the at least one LED based on the varying power- related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19,	This is a "means-plus-function" term pursuant to § 112, ¶ 6. Function: provide at least the power to the at least one LED based on the varying power-related signal Structure: either: (a) the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 (b) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (c) the components of power circuitry 108 that are shown in FIG. 8 and structural equivalents thereof.	Infringement contentions: Ex. F-1, pp. 31-32, 32-34; Ex. F-2, pp. 39-40, 41-42; Ex. F-3, pp. 30-31, 31-32; Ex. F-4, pp. 38-39, 39-40; Ex. F-5, pp. 34-35, 35-37; Ex. F-6, pp. 33-34, 34-35; Ex. F-7, pp. 19-20, 20-21; Ex. F-8, pp. 48-51, 51-54; Ex. F-9, pp. 18-19, 19-20; Ex. F-10, pp. 16-17, 17-18. Invalidity Contentions: see, e.g., Chart F-1 at pp. 89-101; Chart F-2 at pp. 70-75; Chart F-3 at pp. 64-65; Chart F-4 at pp. 13-19, 34-35; Chart F-5 at pp. 79-87; Chart F-6 at pp. 48-57, 85-86; Chart F-7 at pp. 45-52, 83; Chart F-8 at p. 5.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62- 28:26, Figs. 3-8.		
"adjustment circuit" (claims 17, 19)	Plain and ordinary meaning It is Signify's position that this is not a means-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: Function: variably control the at least one parameter of light based on the varying power- related signal Structure: adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification and/or structural equivalents thereof.	This is a "means-plus-function" term pursuant to § 112, ¶ 6 Function: variably control the at least one parameter of light based on the varying power-related signal Structure: the components of adjustment circuit 208 that are shown in FIG. 6 and structural equivalents thereof.	Infringement contentions: Ex. F-1, pp. 27-31, 37-38; Ex. F-2, pp. 38-39, 46; Ex. F-3, pp. 26-30, 35; Ex. F-4, pp. 35- 38, 44; Ex. F-5, pp. 31-34, 42; Ex. F-6, pp. 28-33, 38-40; Ex. F-7, pp. 17-19, 23; Ex. F-8, pp. 43-48, 51-52; Ex. F-9, pp. 17-18, 22-23; Ex. F-10, pp. 16, 21. Invalidity Contentions: see, e.g., Chart F-1 at pp. 87-89, 101; Chart F-2 at pp. 65-70, 76-78; Chart F-3 at pp. 59-64, 70-73; Chart F-4 at pp. 13-19, 34-35; Chart F-5 at pp. 75-79, 97-99; Chart F-6 at pp. 85, 91- 96; Chart F-7 at pp. 82-83, 88- 90; Chart F-8 at pp. 4-6.
an act of: A) providing power to at least one LED based on a power-related signal from an alternating current (A.C.) power source that provides signals other	Plain and ordinary meaning It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the	This is a "steps-plus-function" term pursuant to § 112, ¶ 6 function: providing power to at least one LED based on a power-related signal from an	Infringement contentions: Ex. F-1, pp. 38-45; Ex. F-2, pp. 46-57; Ex. F-3, pp. 35-43; Ex. F-4, pp. 44-53; Ex. F-5, pp. 43-50; Ex. F-6, pp. 41-48;

ource that provides other than a standard	Ex. F-7, pp. 24-29; Ex. F-8, pp. 59-72; Ex. F-9, pp. 23-27; Ex. F-10, pp. 21-24; Ex. F-11,
the components of 404, low-pass filter DC converter 402 shown in FIG. 4 ctural equivalents	pp. 35-37. Invalidity Contentions: see, e.g., Chart F-1 at pp. 3-7, 101-102, 104; Chart F-2 at pp. 3-15, 70-71, 79, 81; Chart F-3 at pp. 3-14, 64-65, 73, 75; Chart F-4 at pp. 3-7, 35, 38; Chart F-5 at pp. 4-13, 79-87, 99-100, 103; Chart F-6 at pp. 3-17, 85, 96, 98-99; Chart F-7 at pp. 4-16, 83, 90, 92; Chart F-8 at p. 6.
	the components of 404, low-pass filter DC converter 402 hown in FIG. 4 tural equivalents fural equivalents

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	drive circuitry) and accompanying discussion in the specification;	thereof.	
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
	Claim 34		
	Structure: may comprise any of the following:		
	(a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
an act of: providing power to the at least one LED based on a	Plain and ordinary meaning	This is a "steps-plus-function" term pursuant to § 112, ¶ 6	Infringement contentions : Ex. F-1, pp. 45-48; Ex. F-2,
power-related signal from an alternating current (A.C.) dimmer circuit (claims 30, 34)	It is Signify's position that this is not a steps-plus-function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6:	function: providing power to the at least one LED based on a power-related signal from an alternating current (A.C.) dimmer circuit	pp. 57-59; Ex. F-3, pp. 43-45; Ex. F-4, pp. 53-55; Ex. F-5, pp. 50-52; Ex. F-6, pp. 48-52; Ex. F-7, pp. 29-30; Ex. F-8, pp. 72-76; Ex. F-9, pp. 27; Ex. F-10, pp. 24; F-11, pp. 37-40.
	function: providing power to the at least one LED based on a power-related signal from an alternating current (A.C.) dimmer circuit	Claim 30 structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4	Invalidity Contentions: see, e.g., Chart F-1 at pp. 8, 102, 104; Chart F-2 at pp. 15-17, 79, 81; Chart F-3 at pp. 14-16, 73, 76; Chart F-4 at p. 7, 36,
	Claim 30	and structural equivalents thereof.	38; Chart F-5 at pp. 13-15, 100, 103-104; Chart F-6 at pp.
	Structure: may comprise any of the following:	<u>Claim 34</u>	17-18, 96, 99; Chart F-7 at pp. 16-20, 90, 93; Chart F-8 at p.
	(a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying	(a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in	6.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	discussion in the specification; (b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification;	FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents thereof.	
	and/or structural equivalents thereof.		
	As a non-limiting example, <i>see</i> '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
	Claim 34 Structure: may comprise any of the following: (a) rectifier 404, low-pass		

Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
(b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification;		
and/or structural equivalents thereof.		
As a non-limiting example, <i>see</i> '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
Plain and ordinary meaning It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is	This is a "steps-plus-function" term pursuant to § 112, ¶ 6 function: providing an essentially non-varying power to the at least one LED over a significant range of operation	Infringement contentions: Ex. F-11, pp. 41-44. Invalidity Contentions: see, e.g., Chart F-1 at pp. 10-11, 102; Chart F-2 at pp. 23-28, 79; Chart F-3 at pp. 23-27, 74;
	filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Plain and ordinary meaning It is Signify's position that this is not a steps-plusfunction term governed by § 112, ¶ 6. To the extent that the	filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8. Plain and ordinary meaning It is Signify's position that this is not a steps-plusfunction: providing an essentially non-varying power to the at least one LED over a

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	governed by § 112, ¶ 6: function: providing an essentially non-varying power to the at least one LED over a significant range of operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408 and DC converter	of the user interface structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 and structural equivalents thereof.	Chart F-5 at pp. 22-25, 100-101; Chart F-6 at pp. 25-30, 97; Chart F-7 at pp. 28-33, 91.
	402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification;		
	(b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification; and/or structural equivalents		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
an act of: providing the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal (claim 31)	Plain and ordinary meaning It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: function: providing the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power- related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying	This is a "steps-plus-function" term pursuant to § 112, ¶ 6 function: providing the essentially non-varying power to the at least one LED over a significant range of operation of the user interface notwithstanding variations in the duty cycle of the power-related signal structure: the components of rectifier 404, low-pass filter 408 and DC converter 402 that are shown in FIG. 4 and structural equivalents thereof.	Infringement contentions: Ex. F-11, pp. 45. Invalidity Contentions: see, e.g., Chart F-1 at pp. 10-11, 14, 103; Chart F-2 at pp. 23- 28, 30-31, 80; Chart F-3 at pp. 23-27, 30, 74; Chart F-4 at pp. 8-10, 37; Chart F-5 at pp. 22- 25, 28, 101-102; Chart F-6 at pp. 25-30, 33, 97-98; Chart F- 7 at pp. 28-33, 35, 91.

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	discussion in the specification;		
	(b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in the specification;		
	and/or structural equivalents thereof.		
	As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.		
act[] of providing the essentially non-varying power	Plain and ordinary meaning	This is a "steps-plus-function" term pursuant to § 112, ¶ 6	Infringement contentions : Ex. F-11, pp. 46-47
based on the filtered rectified power-related signal	It is Signify's position that this is not a steps-plus-	function: providing the essentially non-varying power based on the filtered rectified	Invalidity Contentions: see, e.g., Chart F-1 at pp. 29-37, 104; Chart F-2 at pp. 34-37,

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
(claim 32)	function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: function: providing the essentially non-varying power based on the filtered rectified power-related signal	power-related signal structure: DC converter 402 (Fig. 4)	80-81; Chart F-3 at pp. 32-36, 75; Chart F-4 at pp. 11, 37; Chart F-5 at pp. 39-48, 102-103; Chart F-6 at pp. 40-45, 98; Chart F-7 at pp. 39-43, 92.
	Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408 and DC converter 402 as shown in FIGS. 3 and 4 and accompanying discussion in the specification;		
	(b) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification;		
	(c) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry) and accompanying discussion in		

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62- 28:26, Figs. 3-8.		
an act of: C) variably controlling at least one parameter of light generated by the at least one LED in response to operation of the user interface (claim 34)	Plain and ordinary meaning It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: function: variably controlling at least one parameter of light generated by the at least one LED in response to operation of the user interface Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and	This is a "steps-plus-function" term pursuant to § 112, ¶ 6 function: variably controlling at least one parameter of light generated by the at least one LED in response to operation of the user interface structure: either: (a) the components of rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the	Infringement contentions: Ex. F-1, pp. 48-51; Ex. F-2, pp. 59-65; Ex. F-3, pp. 45-48; Ex. F-4, pp. 56-62; Ex. F-5, pp. 52-59; Ex. F-6, pp. 52-54; Ex. F-7, pp. 30-32; Ex. F-8, pp. 76-77; Ex. F-9, pp. 27-28; Ex. F-10, pp. 25. Invalidity Contentions: see, e.g., Chart F-1 at pp. 56-59, 105; Chart F-2 at pp. 43-48, 82; Chart F-3 at pp. 40-47, 76; Chart F-4 at pp. 13-19, 38; Chart F-5 at pp. 54-60, 104; Chart F-6 at pp. 57-66, 99; Chart F-7 at pp. 52-60, 93; Chart F-8 at p. 7.

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.	drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents thereof.	
an act of: D) variably controlling the at least one parameter of the light based at least on the variable duty cycle of the power-related signal (claim 34)	Plain and ordinary meaning It is Signify's position that this is not a steps-plus- function term governed by § 112, ¶ 6. To the extent that the Court finds that the term is governed by § 112, ¶ 6: function: variably controlling the at least one parameter of the light based at least on the variable duty cycle of the	This is a "steps-plus-function" term pursuant to § 112, ¶ 6 function: variably controlling the at least one parameter of the light based at least on the variable duty cycle of the power-related signal structure: either: (a) the components of rectifier 404, low-pass filter 408, DC	Infringement contentions: Ex. F-1, pp. 52-54; Ex. F-2, pp. 66-68; Ex. F-3, pp. 48-50; Ex. F-4, pp. 62-64; Ex. F-5, pp. 59-61; Ex. F-6, pp. 54-57; Ex. F-7, pp. 32-34; Ex. F-8, pp. 78-82; Ex. F-9, pp. 28; Ex. F-10, pp. 25-26. Invalidity Contentions: see, e.g., Chart F-1 at pp. 59-64, 105; Chart F-2 at pp. 43-49,

Disputed Claim Term or Phrase	Plaintiffs' Proposed Construction	Defendant's Proposed Construction	Cross References
	power-related signal Structure: may comprise any of the following: (a) rectifier 404, low-pass filter 408, DC converter 402 and adjustment circuit 208 as shown in FIGS. 5 and 6 and accompanying discussion in the specification; (b) controller 204B as shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry); and accompanying discussion in the specification; and/or structural equivalents thereof. As a non-limiting example, see '138 patent at 3:12-4:19, 6:28-7:35, 10:49-11:12, 11:24-64, 12:25-23:4, 24:62-28:26, Figs. 3-8.	converter 402 and adjustment circuit 208 that are shown in FIG. 6; or (b) the components of controller 204B that are shown in FIG. 7, FIG. 8 (for the power circuitry) and either FIGS. 9 or 10 or 11 (for the drive circuitry), wherein the processor 102 is programmed according to '399 patent at 17:9-50 and structural equivalents thereof.	82; Chart F-3 at pp. 40-47, 77; Chart F-4 at pp. 13-19, 39; Chart F-5 at pp. 54-60, 105; Chart F-6 at pp. 57-66, 100; Chart F-7 at pp. 52-60, 94; Chart F-8 at p. 7.